

Can homeopaths detect homeopathic medicines by dowsing? A randomized, double-blind, placebo-controlled trial

R McCarney BSc MPhil P Fisher FRCP FFHom F Spink MBBCh MFHom^{1,2} G Flint MB ChB² R van Haselen MSc

J R Soc Med 2002;**95**:189–191

SUMMARY

Dowsing is a method of problem-solving that uses a motor automatism, amplified through a pendulum or similar device. In a homeopathic context, it is used as an aid to prescribing and as a tool to identify miasm or toxin load. A randomized double-blind trial was conducted to determine whether six dowsing homeopaths were able to distinguish between *Bryonia* in a 12c potency and placebo by use of dowsing alone.

The homeopathic medicine *Bryonia* was correctly identified in 48.1% of bottle pairs ($n=156$; 95% confidence interval 40.2%, 56.0%; $P=0.689$).

These results, wholly negative, add to doubts whether dowsing in this context can yield objective information.

Dowsing, also known as divining, water witching or rhabdomancy, has been defined as a 'problem solving technique which apparently utilizes a motor automatism in conjunction with a mechanical instrument to obtain information otherwise unknown to the dowser'¹. Dowsters approach a scenario with a well-defined question in mind and will also pre-specify to themselves (this is known as programming) that motion in one direction indicates 'yes', another way 'no', and thus build up a 'code-book' for their practice. Theories on dowsing come into three categories¹. Normal inference theory suggests that the dowser processes a large amount of information pertinent to the scenario at a subconscious level and moves the instrument accordingly. The physical theory sees the movement in the device being due to the amplification of minute reactions in the human body, with the precise nature of the reaction being unclear. It could be an electromagnetic field², or some form of vibrational energy. According to the theory of psionic medicine³, every living thing and inanimate object is continuously vibrating at a molecular level. This vibration is sensed subconsciously by the dowser, and it is then amplified through the pendulum or other dowsing device. Some proponents of this explanation suggest that this sense originally developed as a survival tool because it enabled individuals to find water. As the vibrational pattern can change with disease, it is purported to be a useful tool for

clinical practice. Finally there is the psychical theory which suggests the dowser employs some form of extrasensory perception.

Scientific experiments into dowsing^{1,4–6} have yielded mixed results. Research into its use in medicine has been limited to veterinary practice^{7,8}. However, the technique is used by some medically qualified practitioners and evidence on its value, or lack of value, could be helpful.

In a published study of homeopathic theory⁹, several UK based homeopaths were asked to distinguish between a homeopathic remedy and placebo by ingesting both and observing their effects. The 12c potency used in this study was selected because it is 'ultramolecular'. It is a dilution of 10^{-24} , so it is very unlikely to contain any molecule of the starting material. One homeopath, unable to determine which was which by this method, attempted to use dowsing to differentiate between the two bottles. From this observation, the following hypothesis was formulated: homeopaths with experience of dowsing can distinguish between *Bryonia* in a 12c potency and placebo by use of dowsing alone.

METHOD

The study was designed as a randomized double-blind trial. Since no material was to be ingested, we did not seek formal informed consent or ethical approval. The volunteers were of course fully informed.

The 50 registered homeopaths who participated in the previously mentioned study⁹ were invited to participate if they had dowsing experience, or to indicate other homeopaths who might be interested in participating.

Academic Unit, Royal London Homoeopathic Hospital, London WC1N 3HR;

¹Faculty of Homeopathy, London; ²Institute of Psionic Medicine, Durham, UK

Correspondence to: R McCarney, Academic Unit, Royal London Homoeopathic Hospital, 60 Great Ormond Street, London WC1N 3HR, UK

Volunteers were sent an information sheet about the trial. They were told that they would receive several sets of bottle pairs, one containing *Bryonia* in a 12c potency and the other containing placebo, and that they must try to identify which was which by use of dowsing alone. For 'training' purposes they were given a reference pair for which the randomization code had been broken.

The trial medication was randomized and blinded in individual two-bottle sets (verum and placebo) in blocks of four. A sample of the bottles had been previously tested for indistinguishability in appearance, smell and taste⁹. Bottles used in this trial were surplus to requirements in the previous study⁹ and thus had not been opened. The remedies were prepared according to the *German Homeopathic Pharmacopoeia* (HAB) by the Clinical Research department of a registered homeopathic manufacturer, HomInt. Placebo was prepared in identical fashion except that distilled water was used instead of the mother tincture. Each participating homeopath was sent 26 bottle pairs, plus the reference set for which the randomized code had been broken.

In discussions before the study began, dowsters expressed concern that the pressure of an experimental situation might be detrimental to the dowsing sense. For this reason the study packs were mailed to the volunteers for evaluation in their own time in relaxed conditions. Similarly it was felt that the dowser would need a very clear question to answer, so the volunteers addressed the question, for each pair of bottles, 'which bottle in the two bottle set contains *Bryonia* in a 12c potency?'

Participants were asked to complete a short questionnaire seeking details of the number of years they had practised homeopathy, number of years of dowsing experience, details of their clinical use of dowsing (if applicable) and the dowsing method used for the study. For each bottle pair they were asked to state whether bottle 1 or bottle 2 contained *Bryonia* and their level of confidence in distinguishing *Bryonia* from placebo (high/low/purely a guess). The first question had to be

answered even if they could not detect a difference through dowsing (and so would indicate 'purely a guess' for the second question).

A formal power calculation was not made, since there have been no previous studies on which to base such a calculation. The number of bottle pairs sent to each dowser was determined by resource constraints. Blinded double data entry was conducted with automated consistency and logical checks. Statistical analyses were performed by means of the Statistical Package for the Social Sciences.

Since no materials were to be ingested, adverse events were thought unlikely; however participants were requested to inform us of any health disorders, intercurrent illnesses or accidents arising during the clinical trial.

A binomial comparison was made between the proportions of correct responses to those expected by chance (0.5). A *P* value and 95% confidence interval were calculated. The main analysis excluded bottle pairs where the participant answered 'purely a guess' to the second question. Secondary analyses were: (i) conducted by participant; (ii) included only the bottle pairs where participants had high confidence in their answer. A logistic regression analysis (backward stepwise regression) was undertaken to see if number of years' dowsing experience, participant or level of confidence were predictive of a correct response. Statistical analyses were conducted blind to which bottle contained *Bryonia*.

RESULTS

All participants who received study materials (*n*=6) provided outcome data (*n*=156 bottle pairs). 5 participants were male, 1 female. All were medically qualified homeopaths (median length of homeopathic practice 20 years, range 15–40) and used dowsing in clinical practice (median length of dowsing practice 22 years, range 12–35). In the study, they used a pendulum.

All participants responded with either 'high' or 'low' confidence and were thus included in the main analysis.

Table 1 Results for individual dowsters

Dowser	No.	High confidence	Low confidence	Correct responses	95% confidence interval	P value
1	26	0	26	16 (61.5%)	42.4%, 80.6%	0.327
2	26	26	0	9 (34.6%)	15.77%, 53.4%	0.170
3	26	26	0	11 (42.3%)	22.9%, 61.7%	0.556
4	26	21	5	10 (38.5%)	19.4%, 57.6%	0.327
5	26	0	26	13 (50.0%)	30.4%, 69.6%	1.000
6	26	26	0	16 (61.5%)	42.4%, 80.6%	0.327
Total	156	99	57	75 (48.1%)	40.2%, 56.0%	0.689

48.1% responded correctly ($n=156$; 95% confidence interval 40.2%, 56.0%; $P=0.689$). Analyses by participant are given in Table 1: percentage of correct responses ranged from 34.6% ($n=26$; 95% CI 15.77%, 53.4%; $P=0.170$) to 61.5% ($n=26$; 95% CI 42.4%, 80.6%; $P=0.327$). Of responses given with high confidence, 45.0% were correct ($n=99$; 95% CI 35.6%, 55.3%; $P=0.421$). In the logistic regression model, number of years' dowsing experience, participant and level of confidence were not predictive of a correct response. No adverse events were reported.

DISCUSSION

The statistical method used here was an exploratory analysis that could lead to misleading results if the data are not independent. The data were in fact so far from showing any type of effect of dowsing that the assumption of independence was probably met, so the more appropriate clustered analysis is unlikely to show a different effect. Our justification for using the exploratory analysis is that it yields results in a simple form (percentage of correct answers) rather than in terms of odds ratios which are less easy to understand.

It is acknowledged that the experimental situation may adversely affect dowsing ability and this may be reflected in the study results. However, there was generally a high level of confidence in the responses ($n=99$, 63.5%), which suggests that we were successful in making the dowsers feel relaxed about the study. High confidence was slightly more associated with an incorrect response.

The dowsers who took part in this study use dowsing clinically to elicit miasm or toxin load and to find appropriate remedies or treatments, often in disorders of

uncertain causation. The sample was small, and the absence of proof of effect does not mean that there is no effect. Nevertheless, the findings must raise a question whether dowsing within a medical framework can produce objective information. If the technique proved effective in a clinical setting, this might indicate a subjective basis, whereby the technique elicits information known intuitively by the physician.

Acknowledgments Andrew Vickers helped develop the original idea. We thank the participants for their help developing the protocol and carrying out the study.

REFERENCES

- 1 Hansen GP. Dowsing: a review of experimental research. *J Soc Psychical Res* 1982;**51**:343–67
- 2 Eastwood NB. Some observations on dowsing and the human magnetic sense. *Lancet* 1987;**ii**:676–7
- 3 Reyner JH. *Pstionic Medicine* 3rd edn. CW Daniels (in press) Saffron Walden
- 4 Parsons D. Dowsing—a claim refuted. *J Soc Psychical Res* 1982;**51**:384–6
- 5 Harvalik ZV. Anatomical localization of human detection of weak electromagnetic radiation: experiments with dowsers. *Physiol Chem Physics* 1978;**10**:525–34
- 6 Enright JT. Water dowsing: the *Scheunen* experiments. *Naturwissenschaften* 1995;**82**:360–9
- 7 Craige JE. Dowsing for diagnosis and treatment. *J Am Vet Med Assoc* 1983;**183**:388–9
- 8 Elliot M. Cushing's disease: a new approach to therapy in equine and canine patients. *Br Homeopathic J* 2001;**90**:33–6
- 9 Vickers A, McCarney R, Fisher P, van Haselen R. Can homeopaths detect homeopathic medicines? A pilot study for a randomised, double blind, placebo controlled investigation of the proving hypothesis. *Br Homeopathic J* 2001;**90**:126–30